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## ABSTRACT

The purpose of this program was to provide an expressive arts program for children in kindergarten through grade three. This program emphasized perceptual-motor development leading to expression in the arts; expression through music, art, movement or dance, and drama. It was designed to provide an atmosphere for creativity, non-verbal expression and problem solving, aesthetic skill development, extended cultural awareness, and valuing. It offered individualized perceptual training for children deficient in such development. Planned parent and community involvement were built into this program. It was designed to generate resource materials and models leading to the development and implementation of curriculum. Program objectives were evaluated by utilization of existing tests and measurement instruments, daily records and case studies, teacher observations, and reports from outside evaluators with recognized expertise. These instruments were used to measure perceptual motor skills, related perceptual-motor behaviors, and academic abilities which may have changed as a consequence of the program: Purdue Perceptual-Motor Survey, Virginia Psycho-Motor Screening Instrument, Peabody Individual Achievement Test, and Goodenough Draw-A-Man Test. Statistical data and reports by outside evaluators support the position that the initial objectives of the program were largely met. (Author/FC)

# Planning Development Federal Programs

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**Special School District No. 1**

**Minneapolis, Minnesota 55413**

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" Minneapolis Public Schools

EXPRESSIVE ARTS THROUGH PERCEPTUAL-MOTOR  
DEVELOPMENT

FINAL EVALUATION 1973-1974

An ESEA Title III Project

This evaluation report was prepared by  
The Kehart Achievement Center  
Fort Collins, Colorado  
under terms of a contract with the  
Minneapolis Public Schools.

C-73-23  
August 1974

Research and Evaluation Department  
Planning and Support Services Division  
807 N. E. Broadway  
Minneapolis, Minnesota 55403

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"EXPRESSIVE ARTS THROUGH PERCEPTUAL-MOTOR DEVELOPMENT"

EVALUATION REPORT

submitted by the N. C. Kephart Achievement Center

A Title III ESEA Project

PART I SUMMARY

A. Program Description

1. Objectives.

The purpose was to provide an expressive arts program for children in kindergarten through grade three. This program emphasized perceptual-motor development leading to expression in the arts; expression through music, art, movement or dance, and drama. It was designed to provide an atmosphere for creativity, non-verbal expression and problem solving, aesthetic skill development, extended cultural awareness, and valuing. It offered individualized perceptual training for children deficient in such development. Planned parent and community involvement were built into this program. It was designed to generate resource materials and models leading to the development and implementation of curriculum.

2. Project Activities

a. Individualized Motor-Perceptual Training.

This training provided intensive individualized motor-perceptual training for children deficient in normally expected skills of balance, laterality, directionality, locomotion, gross and fine motor coordination or perception of space, form, sound, rhythm and sequence.

These same generalized activities were also provided to all kindergarten children.

b. Classroom Experiences in the Arts.

Classroom experiences for all grades ( kindergarten through grade three ) were provided to develop skill and generalization ability in the aesthetic fundamentals used in movement, art, music and drama activities. These specific aesthetic experiences were used to encourage the children to solve problems and express themselves creatively and non-verbally.

c. Building and Experiencing Aesthetic Environments.

Periodically aesthetic environments were provided which would integrate art, music, movement and drama activities or products, planned and executed with the children, parents and teachers when possible.

- d. Professional Aesthetic Presentations.  
Professional artists participated in performances, served as instructors and worked together with children to broaden experiential background and compensate for lack of such experiences.
- e. Improving Student Self-Concepts and Values.  
Activities were provided to increase the children's awareness of (1) self and change in self, (2) products or creations of one's self and of others, (3) other cultures including likenesses and differences and (4) relative valuing and choosing among art forms.
- f. Parent Participation and Involvement.  
Parents were invited to various activities to participate and/or observe the following: (1) individualized motor-perceptual training of their child, encouraging home follow-through; (2) aesthetics classes; (3) aesthetic environments; (4) spring arts festival in collaboration with Phyllis Wheatly Community Center; and (5) attendance at professional performances when space permitted and (6) parent conferences.
- g. Teacher Training.  
This was done in several forms: (1) observing and/or working directly with perceptual-motor and aesthetic classes; (2) using resource materials, equipment, records, books; (3) personal conferences with Project Director; (4) printed materials, audio-visual materials generated from the project; and (5) workshops.
- h. Curriculum Development.  
Although many art activities do not have to be sequenced to be effectively learned, in an aesthetics program certain determinations have to be made about type, order and suitability of activities. This was done in conjunction with class response and feedback from staff and others connected with the project, although formal emphasis was not a first year objective.

## B. Evaluation

### 1. Procedures

The objectives of the program were evaluated by utilization of a) existing tests and measurement instruments; b) daily records and case studies; c) teacher observations; and d) reports from outside evaluators with recognized expertise.

The following instruments were judged adequate for the measurement of perceptual-motor skills, related perceptual-motor behaviors, and academic abilities which may change as a consequence of the program.

- a. The Purdue Perceptual-Motor Survey (PPMS).
- b. The Virginia Psycho-Motor Screening Instrument (VPMSI).
- c. The Peabody Individual Achievement Test (PIAT).
- d. Goodenough Draw-A-Man Test (DAM).

These measures were administered as pre- and post-test (in the Fall and Spring) to 59 children (31 experimental and 28 control) who were matched with respect to age, sex and deficient perceptual-motor abilities. The experimental group was comprised of children within Kindergarten through

grade 3 levels who received extra and individualized perceptual-motor learning experiences.

All children in Kindergarten through grade 3 would participate in the arts program and the Arts Center.

Teachers' records of specific activities and responses to various situations were maintained for each of the children in the experimental group and thereby also provided information which was used in evaluation. Interviews and assessments by Bethune personnel were collected.

Other measures of evaluation were obtained from two outside consultants who made reports based upon on-site observations.

## 2. Findings and Conclusions

The statistical data and the reports by outside evaluators support the position that the initial objectives of the program were largely met.

Students in the experimental group (those who received individual help) exhibited (1) significantly more growth in each of the four perceptual-motor skill factors measured by the Purdue Perceptual-Motor Survey than did students in the control group; and (2) at the conclusion of the year (Spring) there were significant differences in favor of the experimental group over the control group on each of the perceptual-motor factors measured.

On one factor, Ocular-Motor Control, the control group performed significantly poorer in the Spring than in the Fall.

Changes on the Virginia Psycho-Motor Screening Instrument (Experimental version) were significant in both the experimental and control groups on the factor identified as Internal Organization. The control group exhibited significant improvement on the factor Subdued Activity (i.e. less withdrawn and less verbal reticence). Significant differences in favor of the control group were measured on the subtests Subdued Activity and Vision (i.e. less ocular motor fatigue).

The experimental group of students had significantly higher scores on the Draw-A-Man test at the Spring testing period than they did at the Fall testing. However, the experimental group's Spring test scores were not significantly different from the students in the control group.

On the three subtests of the Peabody Individual Achievement Test administered (i.e. Reading Recognition, Math, and General Information) both experimental and control groups exhibited significant increases from Fall to Spring; no significant differences were noted between the groups.

However, there was noticeably a greater number of children in the experimental group than in the control group that exhibited 12 months or more progress in the 8 months between testing. In math 43% of the children showed no less than 12 months gain compared with 22% for the control. In General Information 53% of the children in the experimental group exhibited similar gains compared with 27% of the controls.

The consultants were in agreement that the Expressive Arts Program was of exceptional quality. Both teachers and students responded enthusiastically. Teachers reported benefits to themselves as an outgrowth of working with professional artists and to their students as a result of the perceptual-motor experiences.

## Part II Detailed Report

### A. Identification

1. Minneapolis Public Schools, Special District # 1  
807 N.E. Broadway, Minneapolis, MN
2. Bethune Elementary School  
919 N. Emerson  
Minneapolis, MN
3. Target Population:

All Primary students in regular classes, K-3, ranging in age from 4 - 10 years, approximately 225 children. Classroom teachers of these students are directly involved with their classes.

Indirectly the support staff have become knowledgeable of the program because of referring students for evaluation and help through the program (Social workers, nurse, special education teachers, Principal and assistant, and some 4-6th grade teachers.)

### B. Project Objectives and Activities

The basic premise of this program is that adequate progress in perceptual-motor development leads to and facilitates expression and creativeness in the arts. Also, that activities from the arts can be carefully selected to foster and maintain perceptual motor development.

#### 1. Individualized Perceptual-Motor Training.

While the entire primary population at Bethune participated in the "whole class" arts program, two sub-groups of children were selected. On the basis of poor performance on the PPMS and on the VPMSI treatment and control groups were randomly chosen to determine whether special emphasis on perceptual-motor development would show significant results.

The goal was to "generalize" the following concepts so that a child would not just be proficient in an isolated skill, but be able to use these abilities in a variety of situations. It was helpful if the classroom teacher was also aware of these concepts and applied them, thereby aiding the "generalizing" effect. Children were made aware of the tasks they were doing and the goal of the exercise. This procedure allowed them to better strive toward the goal even when it was hard.

In August equipment and supplies were ordered to be used with children. Some major equipment did not arrive, however,

until November. In September aides were hired and trained by the Project Director. A training introduction was also given to the special education staff teachers and aides by the Project Director. In the training several children with severe problems from grades 4-6, and primary children, (who were not in the treatment program) were diagnosed by the participants with the Purdue Perceptual-Motor Survey. This stimulated an awareness of perceptual-motor problems and a fresh way of observing childrens' activities and performance on the part of support staff and specific classroom teachers involved. In fact a volunteer reading remediation instructor began to use perceptual-motor activities regularly with her students. She witnessed remarkable changes in all students, some of whom had made limited progress for several years. Another child who wrote and read upside-down and backwards, had severe behavior problems and was ready to be sent to a residential treatment center, was dramatically changed because of receiving perceptual-motor development he had lacked. Thus, additional and significant side-effects of the program, were noted.

The actual implementation of the individualized perceptual-motor training was achieved by the Project Director and three aides trained by the Project Director.

Children came to sessions in groups of 12, with three to four staff members, more frequently working with them in groups of three's with much individualized help. Frequently the children and aides worked on a one to one basis while the others were in the group setting.

Group work was effective to introduce an activity, practice it and generalize the activity. It particularly provided the staff with a chance to observe and diagnose in relation to the other children's abilities. When necessary each individual child was provided specific help to improve the unique limitations.

Activities included many variations of the following concepts:

- a. Relaxing and being able to isolate and move specific body parts.
- b. Using the body and parts in controlled, smooth movement and being able to stop and start.
- c. Loosening up, stretching and using body parts in a variety of warm-ups and exercises for flexibility.
- d. Using the whole body in a variety of locomotion and balance activities which integrated a particular pattern, requiring timing and control and coordination. This was done in such a way as to emphasize seeing (vision), hearing (audition) or both with the movement. Activities ranged from simple to very complex.

- e. Building an awareness of the body - how it moves, what it feels like, what it can do, names of body parts, what it looks like. Bodies were also traced and painted, plus many other art activities were used to elaborate this concept.
- f. Special emphasis was placed on using and knowing the left and right sides of the body, working with single and co-ordinated efforts of top and bottom of the body, one side and the other side, and diagonal limbs.
- g. Activities which required crossing the mid- or center line of the body were used with great frequency in movement and eye-hand perceptual activities and on the chalkboard.
- h. Vision was frequently blocked to emphasize kinesthetic awareness and/or auditory awareness.
- i. Auditory awareness and perception was encouraged with special auditory training tapes and devices, musical percussion instruments, metronome, pacing and body-sound patterns (i.e. clapping). Auditory stimuli were coordinated to visual and tactile senses.
- j. Ocular-motor control was observed separately (monocular) and together (binocular) and were trained to track, focus, and use peripheral vision by using an assortment of games and devices.
- k. Visual perception was accomplished through a wide variety of art activities, commercial perceptual 'games', puzzles, patterns, chalkboard and drawing activities. Underlining this concept was matching the eye to the finger and its movements.

Related to the concepts of movement, visual and auditory stimuli were the concepts of figure-ground, elements - whole pattern, vertical - horizontal variation, and size shape, color variation, which were also taught.

- l. Sequencing of patterns, both visual and auditory and then stories were used.
- m. Children were required to verbalize and describe objects, imagery, stories etc., thereby encouraging imagery and associative relationships with their various perceptual experiences.

2. Classroom Experiences in the Arts.

In late October each primary class came to the Arts Center weekly through December. During this period, all classes did essentially the same activities. The activities were planned to integrate the arts when at all possible, and to relate to the theme being worked upon, i.e. dance, puppetry, etc. A particular effort was made to do activities which related to perceptual-motor developmental needs, to give the children a sampling of such activities, and more importantly, to educate their teachers as to areas of development which needed to be stressed and ideas to use upon return to their classrooms.

The period often began with warm-ups, body-parts games and movement, clapping patterns and relaxing. This was to help perceptual-motor development and involvement. Major activities included:

- a. Working with Rick Shope, Pantomime artist, in movement, imagery, and drama.
- b. Building structures and analyzing things like beams, arches, columns, walls, etc. with various size building blocks, and working with architects from Criteria.

One period was devoted to block building and translation into two-dimensional cut paper shapes; another period to constructing large structures with folded paper beams and creating two-dimensional murals of the city.

Often the colored spotlights were used to emphasize visuals, look at the results of their efforts, set moods or for listening or relaxing.

- c. In late November and December, the children worked with clay and made pinch pots. They were fired and glazed.
- d. Tissue paper was decorated with sponge and stamp printing. Christmas cards were made from tissue designs. In addition, paper folded puppets were made and used. Some classes made texture pictures, finger painted, body skeletons; used percussion instruments and devoted more time to dance, made decorations for the room and did various other art projects.

The Kindergarten schedule remained on a weekly one-hour basis. In January, schedules were rearranged allowing a total of 12 hours for each class (Kindergarten through grade 3) from January to May, so that a teacher could choose a one-hour or two-hour period for three consecutive days, or a combination thereof. This allowed for four three-day one-hour periods or two three-day two-hour periods.

It was felt that the consecutive classes would allow for better arts integration based on a thematic approach or more depth if one major art was emphasized. The results made it apparent to the teachers and artists alike that this scheduling format did enable the children to become more involved and appreciative of the experience.

Teachers were asked to choose interest areas for their classes. From teacher comments and observations by the Project Director, program sequences were designed for each class. Not all classes participated in all activities that follow.

Units were done in paper mache, sock and paper puppetry, creating plays with a poet, and performing them with a stage and lighting. A dancer worked with movement, incorporating auditory and visual cues and timing and music. A music specialist worked with rhythms, body movement, timing, and percussive instruments, using auditory and visual cuing singing, imagery and mood lighting.

A unit was done on masks, using Art Institute slides of ancient masks. Paper, paper mache, paper sculpture and sand-core sculpture masks were made. Mime (or theater paint) faces were also used. With the face masks, stories told by pantomime artist, Rick Shope were acted out. A poet worked with children with poetic imagery, words and related art projects.

A professional artist worked with two separate classes of children in his studio, making hanging mobiles and hand mobiles on dowel rods.

In addition, many art activities relating to movement or music or imagery were included. Some activities were modified and repeated with other classes. Fine art prints were used to relate to specific themes, such as rhythmical patterns, and were also discussed. Recordings were used to listen for certain patterns or changes or to imagine stories. Ambiguous pictures were used and turned at different angles to elicit a multitude of images and spur the imagination.

The following artists have participated in the preceding activities and have worked directly with the children:

Nancy Hauser Dancers; Rick Shope (pantomime); Roger Crowell (mobiles); Eric Stokes (musician); Jack Barkala (theater set designs); Rosé Stelton (Orff music); Stanley Keisel (poet); Diana Norquist (poet); Linda Feinberg (dancer); Sage Cowles (dancer); Ron Holbrook (dancer); Pilobolus Dancers (on tour at Walker Art Center); and Jim Jankowski of Criteria (architect).

### 3. Building and Experiencing Aesthetic Environments.

Several times during the year children, teachers and artists built new environments within the room.

Two professionals, one professor of music and composer, and one theater designer worked with children for two and one half days on a 'sound' unit, discovering sounds, making them, illustrating and acting out sound machines, constructing and painting a large cardboard construction, and using it for imagery and movement experiences.

All the while their voice sounds were recorded and composed into a sound composition. A poet and dancer also interacted with the children and the environment they built.

On Halloween, regular classes were canceled and the room was prepared for an obstacle course, mime face painting, movement and musical game. Flourescent lights and special chalk drawings decorated the area. Every primary class experienced the environment.

The Kindergarten classes and the treatment groups often made decorations for the special entrance, a small door within a regular size door frame, through which all children entered the arts room. The children also made decorations for the ceiling, walls and large bulletin boards.

A display of nature, consisting of nests, insects, branches and weeds and stuffed rodents and bones was made.

The ceiling of the hallway on one side of the building (two stories high) were fitted with suspended hangers and decorated with giant mobiles.

4. Professional Aesthetic Presentations.

As indicated previously, many professionals have worked directly with children. Besides enhancing the interaction between children and artist, the artists interacted with the teachers and Arts Center staff. In some cases, teachers became more appreciative of the value of the arts in their class; in other cases, teachers followed through on activities back in the classroom. The stimulation and ideas generated were highly exciting. In many cases the artist provided a 'model unit' to use or adapt to other classes.

In addition to the presentations made for children enrolled in Kindergarten through grade 3, performances were also scheduled for the entire school, through grade 6. These performances included: Rick Shope, pantomime; Nancy Hauser Dance Company; and the Plains People Puppet Theater ('Legend of Pacific North Coast Indians')

5. Improving Student Self-Concepts and Values.

As already indicated, numerous arts experiences enabled the children to try things they had not done before. They received help and positive encouragement. They began to know themselves more fully, and to make things of value.

Many art projects were displayed in two glass cases in the main hall which were acquired by the project for this purpose.

A new event at Bethune School this year was the Arts Fair where an item from each child in the school was displayed for the public.

The Plains People Puppet Show emphasized an Indian culture. A black dancer worked with a class on African dance and music.

Fine arts prints indicated cultural differences. The professionals themselves showed strong variations in style and approach emphasizing different values and interest areas.

Also Super 8 movies and hundreds of slides were taken this year of the children and their activities. They have been shown to all the children in individual classes twice this year. This has been a significant event.

6. Parent Participation and Involvement.

Parents of treatment group children were invited to come to a parent meeting in October and again in May. The parents of one-third of the children attended each time. The program was explained and discussed. In May a slide show was also given. Pictures of their children were also given to the parents.

Several parent conferences occurred and some evaluations were included in report cards. The Project Director attended several meetings with individual parents and support staff on evaluation of children with learning or behavior problems. They had been diagnosed by project staff with Purdue Perceptual-Motor Surveys.

Parents were invited to attend the Shope and Hauser performances. Only a few attended.

An Arts Fair at Bethune attracted about 600 parents. It combined the art of six schools which will desegregate together this Fall. It included art of each of the children, several slide shows, and singing and dance performances. This program originated from the Bethune project and was highly successful in the participation of Bethune parents.

7. Teacher Training.

There was no formal teacher training program for the first year of the project. However, initial sessions were held for the training of aides who would provide the special perceptual-motor activities and necessary individualized help for the children enrolled in the experimental group. There were also initial sessions with special education staff teachers and their aides, support staff and specific classroom teacher which resulted in greater awareness and experimentation among the teachers as well as positive changes among the children not included in the control or experimental groups as reported by teaching personnel.

The Project Director spoke to the entire staff about the project, the rationale and basis for its operation. A slide show of the project was also shown in the Spring.

An attempt was made to improve teacher awareness of developmental skills and stress the need for perceptual-motor development prior to and accompanying symbolic functioning. Also stressed to teachers was the value of the arts in relation to perceptual-motor development.

Teachers were invited to drop in and participate in all phases of the program and most took advantage of the invitation. The majority of the elementary teachers were highly enthusiastic about the opportunities of working with the 'arts' professionals.

Video tapes of the Purdue Perceptual-Motor testing; activities involving the architecture unit; the slide-tape show of the project; and a 16 mm movie to be completed this September, comprised a nucleus of materials for teacher training as well as curriculum development.

## 8. Curriculum Development.

Curriculum development was not a goal for this year. However, many of the year's experiences provided directions for planning and elaborating various material and using certain resource people.

The experiences provided important information regarding the appropriateness and levels of various presentations and new ideas for the implementation and variations of related activities.

## C. Data and Findings

### 1. Procedures for the Analysis of Data

In the Fall, experimental and control subjects were selected from Kindergarten through grade 3. Selection was based upon deficient scores on the Virginia Psycho-Motor Screening Instrument (Virginia Study, 1973). These children were also matched for age and sex.

The treatment program began in late October. Children were grouped in three groups of 12 each. Each group came to the Arts Center for one hour, four days a week. In February, five of those children were placed in a transition group which met weekly as a phase-out process. Remaining groups were slightly smaller. In April, three children were added to the regular groups for temporary help. At the end of April, all treatment groups were terminated. In May, the children were re-tested.

Test data were obtained from 59 students ranging in age from four years, four months to nine years, seven months. The mean age was seven years, two months. Forty-six Ss were male and thirteen were female. Twenty-five male and six female students were assigned to the experimental group. Twenty-one male and seven female students were assigned to the control group. There were no significant differences on age between the students in the experimental and control groups.

Information was gathered on the number of treatment hours received by students in the experimental group. This ranged from thirty to ninety hours. The mean number of treatment hours was 66.4.

All students were tested in the Fall of 1973 and the Spring of 1974 on fourteen of the Purdue Perceptual-Motor Survey items which represent four perceptual-motor factors (Differentiation, Visual-Motor Control, Ocular Control, and Form Perception); on the five Virginia Psycho-Motor Screening Instrument measures (Virginia Study, 1973); the Peabody Individual Achievement Test (Reading Recognition, Math, and General Information); and the Draw-A-Man Test.

The pre-tests of the Purdue Perceptual-Motor items and the subtests of the Peabody Individual Achievement Test were administered by the Project Director, her aides, and a specialist from the Special Education Department of Minneapolis Schools. The retesting of the gross motor items of the PPMs was done by Special Education personnel who were not involved in the program through the year. The remaining retesting was administered by the Program Director and her aides. The Virginia Psycho-Motor Screening Instruments

were completed by the children's classroom teachers. The Draw-A-Man test was scored by a school psychologist who has completed a doctorate on this measure.

The Purdue Perceptual-Motor Survey items and the Virginia Psycho-Motor Screening Instrument questions were scored using the method of Convergence Analysis (Hoffmeister, 1968). Difference scores were generated for all students on all the measures. The "t" test for independent groups (Winer, 1962) was used to determine if the groups were significantly different from each other on these measures. The "t" test for related groups (Winer, 1962) was used to determine if the observed growth for a given group was significantly different from chance.

An additional reading measure was also obtained by recording the number of books gained in the reading series used by the primary teachers.

A lack of measures to assess aesthetic awareness and self-concept among primary children required other means of evaluation. An attempt was made to measure attention time on passages of music and pictures, thus, reflecting increased interest and awareness of elements in the stimulus presentations. However, this proved difficult and was discontinued.

Comments by school personnel were collected and used in evaluation. And in addition to the primary project evaluators, two outside consultants were employed in obtaining on-site information for the evaluation.

## 2. Results

As indicated in Tables I, II, III, and IV, the experimental and control groups did not differ significantly on any of the measures at the Fall, or initial test period (i.e. The Purdue Perceptual-Motor Survey, The Virginia Psycho-Motor Screening Instrument, The Peabody Individual Achievement Test, and The Draw-A-Man Test).

As indicated in Table I, significantly more growth in perceptual-motor abilities occurred for students in the experimental group than did for those in the control group. And in the case of Ocular Control, students in the control group had significantly lower scores in the Spring of 1974 than they did in the Fall of 1973; it is unclear what accounts for the unexpected result. It is possible that the examiner bias had an effect, although if the nature of the bias was to inadvertently score more harshly, it would be expected to have shown up on other Survey items, but it did not. Speculation may suggest that children with questionable ocular-motor control, and in conjunction with other perceptual-motor difficulties, may worsen without appropriate intervention.

As indicated in Table II, both experimental and control group students had higher scores on Internal Organization at the Spring testing than they did at the Fall testing. This subtest of the Virginia Psycho-Motor Screening Instrument is believed sensitive to a functional inter-action of perceptual-motor abilities and environmental demands. In addition, students in the control group had higher scores on Subdued Activity and Vision than did their counterparts in the experimental group. This meant that the control group exhibited (1) less quiet or withdrawn behavior and less verbal reticence than

TABLE I  
PURDUE PERCEPTUAL-MOTOR SURVEY SCORES  
WITHIN AND BETWEEN GROUPS

	Experimental			Control		
<u>DIFFERENTIATION</u>	$\bar{X}$	S.D.	N	$\bar{X}$	S.D.	N
Fall, 1973	1.40	.55	30	1.34	.55	22
Spring, 1974	2.32	.90	30	1.68	.85	22
$t(w) =$	5.89			1.65		
$df =$	29			21		
$p =$	<.001			ns		
	$t(bg) = 2.62, df = 50, p < .005$			Spring, 1974		
<u>VISUAL-MOTOR CONTACT</u>						
Fall, 1973	1.25	.37	28	1.31	.52	26
Spring, 1974	2.14	1.00	28	1.48	.67	26
$t(w) =$	4.23			1.01		
$df =$	27			25		
$p =$	<.001			ns		
	$t(bg) = 2.87, df = 52, p < .005$			Spring, 1974		
<u>OCULAR CONTROL</u>						
Fall, 1973	1.63	.51	28	2.54	.99	23
Spring, 1974	2.77	.92	28	1.98	1.09	23
$t(w) =$	7.87			-2.13		
$df =$	27			22		
$p =$	<.001			<.05		
	$t(bg) = 2.76, df = 49, p < .005$			Spring, 1974		
<u>FORM PERCEPTION</u>						
Fall, 1973	1.88	.73	29	1.92	.46	25
Spring, 1974	2.43	.63	29	2.12	.52	25
$t(w) =$	4.42			1.44		
$df =$	28			24		
$p =$	<.001			ns		
	$t(bg) = 1.98, df = 52, p < .05$			Spring, 1974		

TABLE II  
VIRGINIA PSYCHO-MOTOR SCREENING INSTRUMENT SCORES  
WITHIN AND BETWEEN GROUPS

	Experimental			Control		
<u>INTERNAL ORGANIZATION</u>	$\bar{X}$	S.D.	N	$\bar{X}$	S.D.	N
Fall, 1973	1.29	.37	22	1.49	.60	14
Spring, 1974	1.71	.77	22	2.04	.87	14
$t(w) =$	2.43			2.33		
$df =$	21			13		
$p =$	.025			.025		
<u>SUBDUCED ACTIVITY</u>						
Fall, 1973	2.03	.95	30	2.00	.96	26
Spring, 1974	2.07	.89	30	2.62	.68	26
$t(w) =$	.27			3.49		
$df =$	29			25		
$p =$	ns			.005		
	$t(bg) = -2.62, df = 54, p <.01$					
	Spring, 1974					
<u>VISION</u>						
Fall, 1973	2.70	.46	30	2.68	.60	28
Spring, 1974	2.50	.57	30	2.79	.49	28
$t(w) =$	-1.53			.83		
$df =$	29			27		
$p =$	ns			ns		
	$t(bg) = -2.09, df = 56, p <.05$					
	Spring, 1974					
<u>OVERFLOW</u>						
Fall, 1973	2.28	.83	29	2.04	.93	24
Spring, 1974	2.17	.87	29	2.17	.90	24
$t(w) =$	-.52			.57		
$df =$	28			23		
$p =$	ns			ns		
<u>FINE MOTOR CONTROL</u>						
Fall, 1973	2.38	.81	29	2.31	.77	26
Spring, 1974	2.45	.72	29	2.42	.84	26
$t(w) =$	.57			.77		
$df =$	28			25		
$p =$	ns			ns		

TABLE III  
PEABODY INDIVIDUAL ACHIEVEMENT SCORES  
WITHIN AND BETWEEN GROUPS

	Experimental			Control		
<u>MATH</u>	$\bar{X}$	S.D.	N	$\bar{X}$	S.D.	N
Fall, 1973	5.86	.89	31	5.98	.84	28
Spring, 1974	6.47	1.12	31	6.50	1.17	28
$t(w) =$	5.00			3.54		
$df =$	30			27		
$p =$	<.005			<.005		
<u>READING RECOGNITION</u>						
Fall, 1973	5.62	.76	31	5.80	.61	28
Spring, 1974	6.26	.79	31	6.23	.65	28
$t(w) =$	4.44			4.87		
$df =$	29			27		
$p =$	<.005			<.005		
<u>GENERAL INFORMATION</u>						
Fall, 1973	5.62	.77	30	5.74	.77	28
Spring, 1974	6.26	1.13	30	6.20	1.27	28
$t(w) =$	4.44			2.57		
$df =$	29			27		
$p =$	<.005			<.025		

TABLE IV  
DRAW-A-MAN SCORES  
WITHIN AND BETWEEN GROUPS

	Experimental			Control		
<u>Draw-a-Man</u>						
Fall, 1973	79.10	9.88	30	80.11	12.13	27
Spring, 1974	84.47	8.41	30	81.15	11.88	27
$t(w) =$	2.49			.48		
$df =$	29			26		
$p =$	$<.025$			ns		

TABLE V

NUMBER OF CHILDREN SHOWING 12 MONTHS OR  
MORE PROGRESS IN 8 MONTHS

PIAT Subtests	Experimental	Control
Mathematics	9 (N= 21)	4 (N= 19)
Reading Recognition	2 (N= 22)	2 (N= 24)
General Information	10 (N= 19)	4 (N= 15)

the experimental group and (2) less behavior indicative of ocular-motor fatigue. At first, the results which indicate less ocular-motor fatigue but poorer ocular-motor control, appear inconsistent. However, the results may very well indicate that those children who are currently working hard to improve ocular-motor function may also be subjected to fatigue, while those who are not improving their skills show less fatigue. No significant differences were observed either between or within groups on the Overflow (excessive motor output) and Fine Motor Control factors.

It should be noted that one of the nine elementary teachers completing the Screening Instrument (VPMSI) checked all positive scores for all six of the children enrolled in that classroom. It is also probable that as the year went on, the level of teacher awareness increased and they, in fact, became more discriminating in their judgments.

As indicated in Table III, both groups had higher scores on the Peabody measures at the spring testing than they did on them at the Fall testing period, but no significant differences were seen between the two groups at the end of the year. While not statistically of particular significance, it is interesting to note that the experimental group did show somewhat greater improvement in the subtest General Information.

Upon tabulation of the data it also became apparent that a noticeably greater number of children in the experimental group, as compared with the control group, progressed 12 or more months on achievement measures. These changes occurred within the 8 months of the program. Changes were most apparent on the subtests Math and General Information. Table V indicates the number of students in the experimental and control groups which made 12 months or more progress. On the Math subtest 9 out of 21, or 43%, of the experimental group progressed 12 or more months. For the control group, 4 out of 19 or 22% made similar progress. With respect to performance on the General Information subtest 10 out of 19 or 53% of the experimental group progressed 12 or more months while 4 out of 15 or 27% of the control group made similar gains.

Table IV reveals that experimental group students had significantly higher scores on the Draw-A-Man Test at the Spring testing period than they did at the Fall testing. However, the experimental group's Spring test scores were not significantly different from the students in the control group.

Information was also collected on the number of books gained in the reading series. No significant differences between the groups was observed on this variable. The average gain for the two groups was 1.8 and 1.9 books for the experimental and control groups respectively.

Teacher comments (refer to the appendix, page 35) indicate noticeable changes in classroom and academic achievement among a number of children as a direct consequence of the program.

The solicited and unsolicited comments by the teachers also indicate the enthusiasm of the children and teachers alike. Exuberant children would often stop program personnel in the hall and ask when they would be returning to the Arts Center. Reports came from many teachers about children who wished to come to the Arts Center. There were also reports of children who were disruptive and acting out in classrooms who would be thoroughly absorbed in the Arts Center and that these interests and controls carried over into the classroom. Teachers themselves were highly enthusiastic about opportunities to work with arts professionals.

One teacher who, in October said none of her first graders like to dance (nor did she), got her entire unit to support a dance-in-the-schools program for next year which requires their personal participation.

The skills and awareness of the teachers also improved. Teachers are now able to identify children who need perceptual-motor help. One teacher who attended a special education meeting on slow learners said she didn't realize how much she had learned from the project until the meeting because she was already now familiar and aware of the content of the meeting and how to observe children with problems.

On site evaluations during the Spring by Philip Salapatek and Robert Shaw, whose reports are included in the appendices, would seem to support the successes of the program. Also included in the appendix are letters of persons who visited the program.

#### D. Conclusions and Recommendations

The results of the Bethune School Program, "Expressive Arts Through Perceptual-Motor Development" indicate a very successful first year project.

It is apparent that a program designed to provide learning experiences in the expressive arts can successfully incorporate activities which also develop perceptual-motor skills. The program further demonstrates that in the framework of an arts program the perceptual-motor skills of children recognized as being deficient in the area, can be improved.

The program successfully involved professional community resources in a public school program which has focused upon the arts. In doing so, it has brought competent and sensitive expertise into the child's environment which has resulted in an enthusiasm and degree of involvement among teacher and child alike. The degree of enthusiasm on a school-wide basis is seldom seen. Similarly the program has successfully involved the parents and the school in a mutually rewarding experience that goes beyond mere academic objectives.

Dissemination of information regarding the project has already been undertaken and additional material is being planned for the Fall.

The future thrust of the program might well focus upon curriculum and teacher inter-action as a means of providing in-service training.

A major gap in perceptual-motor and/or arts programs has been the lack of effective integration of perceptual-motor experiences into existing curriculum and the development of concepts which emerge directly from perceptual-motor experiences. Similarly, there is need for ongoing elaboration, support, and reinforcement of these experiences in order to ensure more adequate perceptual-motor integration throughout the entire school population.

The program initiated appears to be an effective way of weaving perceptual-motor experiences into a curriculum which naturally lend itself to the interaction of motor-perceptual-conceptual functions. The multi-dimensional aspects of the arts provides a greater wealth of possible interactions than are available in any other content areas.

It would seem desirable to more fully document curriculum and curriculum experiences that result in the desired interactions. It is also recommended that this curriculum be extended upwards.

The second area of focus might well be teacher training. It is apparent from the information received that the majority of teachers have significantly benefited from the program and that the benefit appears to have resulted from ongoing, direct interaction with children and professionals in activities or applied situations. Here also it would seem desirable to more systematically approach this facet of the program.

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Kephart Glen Haven Achievement Center and the Virginia Department of Education Task Force on Psycho-Motor Needs Assessment. Psycho-Motor Needs Assessment of Virginia School Children. Richmond: Federal Programs Office, State Department of Education, 1973.

Winer, B.J. Statistical Principles in Experimental Design. New York: McGraw Hill Book Company, Inc., 1962.

APPENDIX

Report of a Program on  
Expressive Arts Through Perceptual-motor Development

Prepared by: Philip Salapatek, Ph. D., Institute of Child Development,  
University of Minnesota

Robert Shaw, Ph.D., Department of Psychology, University  
of Minnesota

Selected Vita

P. Salapatek, B.A. University of Toronto (1963); Ph.D., Yale University  
(1966); Assistant Professor, Department of Psychology,  
University of Pennsylvania, 1966-70; Associate Professor,  
Institute of Child Development, University of Minnesota,  
1970-

Consultant: Philadelphia Parent Child Center, Summer, 1969,  
1970, 1971. Design and evaluation of programs for day-care,  
parent-child center, home visiting program.

Consultant: Office of Child Development.

1970: National evaluation of Parent-Child centers  
1972: Site visits of three parent-child programs

Consultant: National Institute of Education  
1972: On-site evaluation of six program-project  
proposals on research in early education.

Consultant: Rand Corporation  
1973: Preparation of a test battery for national  
evaluation of perceptual-motor development

Consultant: Minneapolis Institute of Art (1973- );

Demonstration and teaching exhibition for  
children on perception and painting.

Relevant Publications

Numerous scientific papers on social and perceptual development,  
published in the Journal of Comparative and Physiological Psychology,  
Journal of Experimental Child Psychology, Journal of Experimental Psychology,  
among others.

Also a book, Infant Perception, co-edited with Dr. L. Cohen (University  
of Illinois). This volume is currently in press with Academic Press.

Report of Site Visit by P. SalapatekI. Conditions of visit & purpose of report.

This report is not meant to be either a comprehensive evaluation of the current Bethune program, nor an extensive design for the proposed Bethune program. It was the site visitors' understanding that an extensive perceptual-motor program currently exists, along with an ongoing and proposed outcome evaluation by other, competent evaluators. Within this context, then, we agreed to visit the current program for a brief period of time, while in session, and to examine available documentation, in order to provide another, hopefully-informed judgment of the Bethune project, along with whatever criticisms or suggestions that appeared most warranted.

I visited the Bethune project on the morning of April 29, 1974. Classes were in progress and staff were present. However, I am fully aware that I had but a very limited exposure to the many projects in the program, and to the children and their day-to-day progress and behavior. Nevertheless, this visit, along with the examination of written materials available regarding the project and the evaluation, make me reasonably confident regarding my conclusions and suggestions. Available to me were the original grant proposal, the director's summary of the program's first year, the list of community artists participating in the program, and a variety of tests to be used for evaluation.

II. Facilities:

I was very favorably impressed with the program's facilities in Bethune school. These do not appear to be a major area of concern at all.

III. Staff:

The staff-student ration (approximately 1:3 or 4 in the sessions I observed) seems reasonable for most activities, especially with near-normal

children. It should not go any lower. In fact, for children with severe difficulties, as much 1:1 interaction as possible is desirable.

The director and her first assistant insure the success of the activities. In a program of this kind, it is critical to have people with infectious and endearing personalities in order to hold the children's attention, to strongly motivate their responses; to make them spontaneous and imaginative, and, yet, at the same time to maintain control over their behavior. One could observe a marked decline in the quality of the group's behavior whenever the director or her assistant dropped out. The second assistant did not appear to be as blessed with the foregoing attributes.

#### IV. Program:

On paper, and, indeed, from what I could see, in practice also, the Bethune program is as rich a program as one is likely to encounter in perceptual-motor training. It is a program which, by purpose, seeks to correct perceptual-motor deficits, facilitate other learning such as reading, heighten self-esteem, improve aesthetic appreciation, and develop creativity and imagination. And, in practice, the content of the program appears, at face value, to be very well directed towards these objectives. This reviewer can find almost no fault with the content of the program for these purposes.

#### V. Program Evaluation and Suggestions:

With a program of the foregoing variety, evaluation of change in performance is uniquely difficult, even if obvious purposes appear to be accomplished. Given that I feel the program to be rich in general perceptual-motor and aesthetic content, I would like to focus here on evaluative issues. First, the current evaluation, consisting of random experimental and control groups, along with pre- and post-testing by means of standardized

tests, such as the current Virginia Psycho-Motor Screening Instrument, or school achievement tests, is satisfactory for general perceptual-attentional-motor progress. I would strongly recommend, however, that as many different tests as possible be used (since different tests do not intercorrelate that highly), and also that the same test (especially if it is a rating scale) be given by different testers in different situations for the same child. For example, one might have the child rated in the program classroom, his home classroom, and in his math classroom, by different people, to see if the treatment generalizes to new environments. Multiple raters, in the same environment, also allow an assessment of reliability of the test.

Beyond general perceptual-motor assessment, however, more knotty problems remain. Let us assume that the complex Bethune project has the far-reaching effects it is designed to have. In this case, we are faced with two problems: (1) measurement of the far-reaching effects, and (2) figuring out what in the program content caused what effects. The far reaching effects to be measured concern such things as self-esteem, aesthetic judgment, artistic ability, and creativity. We do not, at this point, have satisfactory, agreed-upon measures for these traits. However, they can be developed, at least in an initial, probably convincing way. Enclosed for the director is a summary and critique of all current measures and tests of self-esteem. It is recommended that the director develop a scale in this, and in other areas, in collaboration with skilled consultants.

Suppose children in the program show improvement on whatever scales are ultimately used. Obviously, then, one would wish to know what particular facet of the program caused what effect. For example, what aspect of the program most improved attention, or elevated self-esteem. One might, on the basis, of such knowledge, wish to give particular children different inputs.

The program as currently designed for evaluation, cannot answer such questions. To do so one requires either a reasonably-complicated regression analysis of the existing program, or miniature experiments (with single, or multiple children) within the program. For an applied effort of the type of program here, one might best proceed by a daily recording of progress, with perhaps, some single-subject, within-subject manipulations of training.

The foregoing comments are by no means to be understood as damaging criticisms of the program. A program grows and matures, and its first task is to show, in some way, that it works. Only then is it incumbent to answer more detailed questions regarding the exact nature of effects, and the exact nature of causes.

A final word: This consultant was very stuck by the balance between expression and control in the program, i.e., teachers fostered spontaneity and creativity, but demanded attention and motor activities. I feel this is most essential for the success of a perceptual-motor remedial program. A program can only work if it is implemented, i.e., if the subjects in the program actually receive the treatment they are supposed to.

(Signed) \_\_\_\_\_

Philip Salapatek, Ph.D.  
Associate Professor  
Institute of Child Development  
University of Minnesota  
May 5, 1974

Brief Vita

Robert E. Shaw, Professor of Psychology, University of Minnesota, Ph.D.  
Vanderbilt University, 1969.

Areas of specialization: psychology of language, perception and cognitive development.

Relevant Background: Consultant to the Aphasia Clinic at the Minneapolis Veteran's Administration Hospital, 1967-71.

Currently a consultant with Minnesota Systems Research on Interaction Codes project.

Consultant for the Learning Center at the Minneapolis Institute of Art.

Consultant on the German language project and the art history project with the University of Minnesota Instruction Design Group.

Relevant Publications:

Major publications in the areas of cognitive development having to do with extensions of Piagets research on the childs' concepts of space and number.

Several publications in the area of speech disorders (aphasia).

Co-author of forthcoming book entitled Schuell's Aphasia in Adults, Harper and Row (in press).

Co-author of forthcoming book entitled Acting, Perceiving and Comprehending: Toward an Ecological Psychology. Lawrence Erlbaum and Associates (in press).

Report of Site Visit by R.E. Shaw

On May 2, 1974 I visited Bethune School to observe the current stage of development of the innovative program to teach expressive arts through training of children in perceptual and motor skills. Since my contact with the project is limited to this one visit, no extensive formal evaluation is yet possible. However, from this visit, conversations with the project director, her assistants, visitors and the children themselves, and from a careful reading of all available documents describing the project and its progress, I feel competent to offer the following tentative appraisal of the project with respect to its theoretical justification, practical feasibility and direction its course of development might follow.

My evaluation will involve three levels of analysis: First, general comments regarding the theoretical and practical feasibility of the project; second, an opinion as to the extent to which the program seems to be meeting the objectives set out in the proposal; and, finally, some specific recommendations as to how the program might be improved. I should also point out that the remarks given below will be very general since this seems most appropriate at the current time. However, more extensive comments would be possible given further opportunities to observe and make inquiries about the project. If in the future this more detailed evaluation is deemed desirable, I strongly suggest that the consultant be allowed to work closely with the project coordinator over an extended period of time sufficient to allow for certain minor but important changes to be introduced into the project activities.

General Comments

My overall reaction to the Bethune project was both positive and enthusiastic. The program of activities by which the children are

given training in the expressive arts are of exceptional quality. One of the strongest pieces of evidence that the program is at least prima facie successful is the enthusiastic response it has received from the general community. The project has received enthusiastic endorsement from other teachers in the school as well as the enthusiastic cooperation of experts in the arts who have shown an uncommon willingness to become seriously involved in the project. Consequently, the quality of training the children are receiving in art, poetry, music, architecture, theatrics and other forms of expressive arts seems to me unprecedented. From the standpoint of mobilizing community resources, the involvement of competent resource persons, the available physical facilities, and the competence of the staff, the Bethune project in its first year of existence must be considered successful. Moreover, there seems every reason to presume that next year the project will be even more successful as certain rough edges are polished and the program of activities become more tightly focused.

Given then the practical feasibility of the project made possible by the ability of the project coordinator to mobilize and use available school and community resources, we might turn next to the theoretical justification of the project. A thorough defense is not allowed in so brief a report; but I will at least list the set of principles which current research supports and which seem to me to provide a firm foundation for the instructional techniques used in the project.

It seems well established that (1) learning is best facilitated in a pedagogical atmosphere that requires active participation by the child in problem solving activities rather than mere passive reception of information. (2) Also there should be a well articulated, optimally sequenced set of tasks that require serious effort on the part of the child but which

may be realistically solved. A frustrated child does not learn. An unstimulated child becomes bored, and also fails to learn. (3) The activities should be meaningful to the child in the sense of culminating in some overall objective which systematically incorporated the child's momentary efforts. So often a child loses interest in learning for learning's sake alone or when the payoff is deferred to some distant future.

The Bethune project succeeds on all three accounts by involving the children in the production of projects at all levels of participation. First, the goal is carefully explained (e.g., "Children, this week we will build a machine"). The children are then encouraged to plan the project which entails discussions in which their ideas are actively solicited and ultimately incorporated into the project. Sub-goals are well articulated and made manifest in a set of manageable tasks and distributed to the children by soliciting their cooperation. (e.g., the children may design and decorate various components for the "machine"). The children, under the direction of visiting experts, are assisted in combining their individual projects into a systematic presentation. (e.g., the production of a "machine-like" set). Finally, the children are encouraged to interact together to orchestrate a story with sound effects, music, dance, etc. around their production.

Thus, the children are directed to create through cooperative work something that they can both understand and enjoy. The project's activities have a beginning, an end, with well articulated, realistic subgoals in between. The child learns (one presumes) the value of seeing projects through to end since there is intrinsic satisfaction associated directly with the work itself. The technique should be more effective in getting the child cooperatively involved in his own education than more traditional

techniques which allow him to be nothing more than a passive recipient of information whose value and usefulness is nearly always deferred to some distant future.

More technically, there is reason to believe that coordinated activities which draw on different sense modalities are the most effective means to learn concepts. Similarly, activities that require coordination of perceiving and acting facilitate the differentiation of complex concepts into more manageable component concepts. The child in the Bethune project is, I believe, being taught how to "program" himself to understand complex concepts by breaking them down into component parts. The child is essentially learning how to do a "means-ends" analysis of problems in an atmosphere that fosters self-esteem and hence rewards the child for his efforts by always providing him with a taste of success.

## II. Specific Suggestions.

Although the overall project is theoretically well motivated and seems practically feasible, some improvements now seem appropriate. The major difficulty with innovative projects is solving the problem of how they might be evaluated. I do not believe there exist any tests which can be applied so early in a project's development to answer definitively whether the project is succeeding or not. What we might realistically hope for is a sharpening of short range objectives to an extent that their ongoing assessment is possible.

These would not be "tests" in the sense of "exams" as usually given to assess class performance. Rather, a set of graded tasks might be given to the children which must be "passed" through before going on to higher achievement goals. These tasks might take the form of activities which possess intrinsic pedagogical value and which would not be viewed by the

child as tests of competence, but might be viewed by the teacher as a set of bench marks. In short, all testing should in my opinion be integrated into the learning process itself. The details of how this might be done can be worked out with the project coordinator at any time in the future that formal ongoing evaluation becomes desirable. The procedures I am suggesting have been successfully applied to several instruction development projects at the University of Minnesota over the past five years.

(Signed)

Robert E. Shaw  
Associate Professor of Psychology  
University of Minnesota  
May 5, 1974

COMMENTS FROM BETHUNE STAFF ABOUT THE EXPRESSIVE ARTS PROGRAM

March, 1974

"It's helping them become more aware of self."

"It helps the students to think and find out more about themselves."

"I'm impressed, I only wish it (treatment program) could be extended to test the entire class so I knew more of 'needed areas' to concentrate on in homeroom activities."

"I think it's necessary for most children--needs to be followed through in rooms, and teachers need to know more about it, how to observe, how to do".

"I feel children need to be in tact body wise before other learning can most efficiently take place."

"The program is greatly needed--the success of a child in this program lays the foundation for overcoming problems in academic areas."

"Those with severe midline problems also exhibited many reversals in letters, words or numbers. When exercises designed to overcome this physical difficulty were incorporated into the daily program, the reversal problems were eliminated."

"I think it is most needed and that many more could use this help."

"It has been responsible for changes in kids that have helped them to succeed."

"The staff and children are very interested in the program. I don't really feel, however, that many of the classroom teachers know how to continue the program in individual classrooms and/or use the results of the treatment program."

"I have seen excited children come from the arts center. It is designed for THEM and they know it."

"I have noticed positive changes in behavior--less tense, follow directions more easily, more relaxed, attends for longer periods of time."

"I have seen improvement in my children who have worked in perceptual motor treatment. I particularly see a change in attitude from withdrawn to more outgoing, improved relation to the space they work in, and improved printing skills. One child was receiving help in reading, math, and perceptual skills. In evaluating her progress we decided to concentrate her help in the area of perceptual motor development because of her great need and little progress in the other areas because of perceptual problems."

"The whole-class aesthetics part of the program has been fantastic. It has provided experiences for my children that I could not provide for them by people who are experts in their artistic fields. The children have been really enthusiastic about going and have brought ideas back to the classroom such as pantomime, puppetry, building construction and stress points in their bodies. It has been extremely valuable for me to be able to observe and participate with the children. I don't get this chance in the room because I always am in the teacher role."

"I give remedial reading help to children and have worked with some for several years. This year I have used many perceptual-motor activities and have seen definite and dramatic improvements in their reading and writing."

3 May 1974

Children have ears as well as eyes and to use them is an education in self perception.

These 3 days working with elementary school children at Bethune have reinforced my conviction that children can and will participate to their own benefit in programs that center on sound:

- as an environment
- as a mirror of themselves (their own voices recorded and played back, etc.)
- as a touchstone for imaginative play and invention (story telling, descriptive projects both verbal and visual)
- as an important part of the geography of their days.

(Signed) Eric Stokes  
Assoc. Prof. of Music  
U. of M.

JACK C. EDLING  
Senior High Principal

VALDMAR A. XAVIER  
Brookside Junior High School  
Principal

TERRANCE E. MORIARTY  
Southwest Junior High School  
Principal

JAMES GUSTAFSON  
Activity Director

## ALBERT LEA PUBLIC SCHOOLS

Albert Lea, Minnesota 56007

Independent School District No. 241

CURTIS E. McCAMY, Superintendent of Schools

Nov. 16, 1973

VIRGIL PITMAN  
Assistant Senior High Principal

ROBERT BERTHESEN  
Assistant Principal Southwest  
Junior High

MERRILL MIELKE  
Assistant Principal Brookside  
Junior High

DALE SHULDES  
Director of Guidance

Mr. Wallace Kennedy  
Urban Arts and Humanities  
Minneapolis Public Schools  
Minneapolis, MN 55402

Dear Mr. Kennedy:

We three teachers in SLPP are grateful for the opportunity to visit the program of Expressive Arts through Perceptual-Motor Development at the Bethune School. We have worked with large muscle and small muscle coordination exercises, but until we saw Mrs. Papke's instruction in action we did not realize the value of physical manipulation to induce and to teach relaxation. We were surprised at the degree to which the youngsters did lose their tension and defensiveness after an hour of Perceptual-Motor learning of this kind.

We want to experiment with "body language" and pantomime to enhance perceptual-motor development. We would like to return to see the afternoon program, too, in which arts are emphasized.

For us this was a new approach to dealing with hyperactivity. It has opened new doors for us.

Thank you,

*Merrill Mielke*

SLPP Lead Teacher  
Albert Lea Public Schools

WL/dq



Albert Lea Area Vocational Technical Institute

# State of Minnesota

Department of Education  
Capitol Square, 550 Cedar Street  
St. Paul, Minnesota 55101

May 22, 1974

Ms. Carolyn Papke  
Bethune Elementary School  
919 Emerson Avenue N.  
Minneapolis, Minnesota 55403

Dear Carolyn:

As the result of our visits to your Perceptual-Motor Expressive Arts classes this month, we can see the potential for similar programs in all elementary classrooms not just exceptional situations.

Bob Paul, David Price, and I are interested in exploring with you these areas for discussion concerning your program:

1. Coordination assistance for replication.
2. Greater visibility and in-service training for the pilot project.
3. Assistance in creating evaluation procedures which would document the accomplishments of such programs.

We hope to talk with you next week, and again, our congratulations and encouragement for the program you have initiated.

Sincerely,

*Ann D. Lewis*

Ann D. Lewis, Coordinator  
Special Projects Arts and Humanities

ADL:ltbk

cc: D. Price  
R. Paul  
Eugenia Oole  
Wallace Kennedy  
G. Mc Donough  
Cy Yessner

JOHN J. McFALL  
CALIFORNIA  
MAJORITY WHIP

CHIEF DEPUTY WHIP  
JOHN BRADEMAS  
INDIANA

DEPUTY WHIPS  
JIM WRIGHT  
TEXAS

RICHARD H. FULTON  
TENNESSEE  
SPARK MATSUNAGA  
HAWAII

**Congress of the United States**  
**House of Representatives**  
**Office of the Majority Whip**  
**Washington, D.C. 20515**

**ZONE WHIPS**

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2. SAMUEL S. STRATTON
3. BENJAMIN S. ROSENTHAL
4. WILLIAM S. MOORHEAD
5. DOMINICK V. DANIELS
6. DAVID E. SATTERFIELD
7. JOHN J. FLYNT, JR.
7. CLEMENT J. ZABLOCKI
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12. DON FUQUA
13. JOHN C. CULVER
14. DAN ROSTENKOWSKI
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16. JAMES R. JONES
17. MORRIS K. UDALL
18. EDITH GREEN
19. GEORGE E. DANIELSON

March 26, 1974

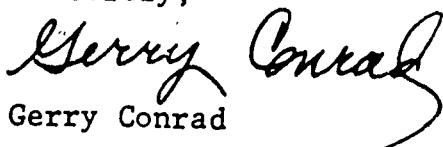
Ms. Carolyn Qualle Papke  
Bethune School  
Minneapolis, Minn.

Dear Carolyn:

I appreciate your sending the recent correspondence regarding "Expressive Arts Through Perceptual-Motor Development." I was truly impressed by your creativity and the day I spent looking at the Title III programs introduced me to a new concept of early education I have adopted as one of my causes.

I only wish I had the influence and money to personally assist you! I would love to hear how the situation is finally resolved and I hope you don't mind that I continually bring you up as an example worthy of note.

Sincerely,

  
Gerry Conrad



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February 21, 1974

Carolyn R. Papke  
1515 Kaltern Lane  
Minneapolis, MN 55416

Dear Carolyn,

I must tell you how impressed I was with your program. The two days spent in your classes with the children, visiting with your staff and teachers and going over the recorded notes of the children's progress were most exciting.

It is apparent that the program is meeting its original objectives, but perhaps even more significant are some of the additional changes and benefits which are an out growth of the program.

(1) The aides, some of whom have had no previous training or experience, with the exception of this program, have already acquired important and essential skills in working with the children. It is obvious that they are developing observational skills which permit them to see aspects of behavior and performance that frequently go unnoticed. It is equally apparent that the aides are reaching a level of capability that permit them to alter, adapt, or even substitute activities which better meet the needs of individual children.

The increasing ability level of the aides indicate that the format of the program and the nature of the aides involvement is resulting in both significant training and maximum effectiveness in the use of "para-professionals".

- (2) Classroom teachers are reporting improvements in behavior, self control and attention, which in turn, is resulting in improved classroom performance.
- (3) Classroom teachers have taken an interest in the program and are visiting and discussing children and objectives with the program staff. Significantly, a number of teachers are incorporating some of the objectives and activities in their own classrooms.
- (4) The program, while presently limited to K through 3, is able to meet individual needs irrespective of grade level and within the context of the expressive arts. It is meeting the needs of children who have not as yet developed normally expected perceptual

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motor skills, but is also meeting the needs of those children whose lack of skills are more severe. For these children the program results in remedial intervention.

(5) It is significant that the preceding benefits are being achieved through a single program; thereby, multiplying the effectiveness of the project.

Effective in-service training is being achieved in the context of working with children in an ongoing program; and remedial as well as developmental needs are being met within an expressive arts curriculum. This program does not require segregation of children or services, or elaborate use of professional diagnostic and teaching personnel.

I believe your project is proving to be a most effective program, as well as promising significant direction for future development.

Best regards,

J.M. Weddell  
Program Director

JMW:kz

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